

clonal antibody comprises a light chain variable region encoded by the DNA sequence having at least 90% homology to SEQ ID NO: 12.

**14.** The isolated monoclonal antibody which binds ESB GP of claim **13**, which monoclonal antibody comprises a light chain variable region encoded by the DNA sequence SEQ ID NO: 12.

**15.** An isolated monoclonal antibody which binds to ESB GP, which comprises a heavy chain comprising complementarity-determining regions having the amino acid sequences of SEQ ID NOS: 20-22.

**16.** The isolated monoclonal antibody of claim **15**, wherein SEQ ID NO: 20 is located at position 31-35, SEQ ID NO: 21 is located at position 50-65, and SEQ ID NO:22 is located at position 95-102, which amino acid positions are numbered according to the Kabat system.

**17.** An isolated monoclonal antibody which binds to ESB GP, which comprises a light chain comprising complementarity-determining regions having the amino acid sequences of SEQ ID NOS: 23-25.

**18.** The isolated monoclonal antibody of claim **17**, wherein SEQ ID NO: 23 is located at position 46-56, SEQ ID NO: 24 is located at position 71-77, and SEQ ID NO:25 is located at position 107-115, which amino acid positions are numbered according to the Kabat system.

**19.** A composition comprising the isolated ESB virus monoclonal antibodies (MAbs) of an antibody produced by hybridoma S 3C10, an antibody produced by hybridoma S 16F6, an antibody produced by hybridoma S 16H11, an antibody produced by hybridoma S 17F6, an antibody produced by hybridoma S 19B3, an antibody produced by hybridoma S 19B4; and, an antibody produced by hybridoma S 19F10.

**20.** The composition of claim **19**, further comprising a pharmaceutically acceptable excipient.

**21.** A method for preventing ESB virus infection in a mammal, comprising the step of administering to a mammal, prior to the mammal being challenged with ESB virus, an effective amount of a composition comprising the isolated ESB virus MAbs of an antibody produced by hybridoma S 3C10, an antibody produced by hybridoma S 16F6, an antibody produced by hybridoma S 16H11, an antibody produced by hybridoma S 17F6, an antibody produced by hybridoma S 19B3, an antibody produced by hybridoma S 19B4; and, an antibody produced by hybridoma S 19F10.

**22.** The method of claim **21**, wherein the composition further comprises a pharmaceutically acceptable excipient.

**23.** A passive vaccine against ESB virus infection comprising an effective amount of a composition comprising the isolated ESB virus MAbs of an antibody produced by hybridoma S 3C10, an antibody produced by hybridoma S 16F6, an antibody produced by hybridoma S 16H11, an antibody produced by hybridoma S 17F6, an antibody produced by hybridoma S 19B3, an antibody produced by hybridoma S 19B4; and, an antibody produced by hybridoma S 19F10.

**24.** A method of ameliorating an ESB virus infection in a mammal, comprising the step of administering to a mammal infected with ESB virus an effective amount of a composition comprising isolated ESB virus MAbs of an antibody produced by hybridoma S 3C10, an antibody produced by hybridoma S 16F6, an antibody produced by hybridoma S 16H11, an antibody produced by hybridoma S 17F6, an antibody produced by hybridoma S 19B3, an antibody produced by hybridoma S 19B4; and, an antibody produced by hybridoma S 19F10.

**25.** The method of claim **24**, wherein the composition further comprises a pharmaceutically acceptable excipient.

**26.** A method for detecting ESB virus in a sample, said method comprising:

- (a) incubating the sample with an effective amount of at least one MAb selected from the group consisting of the antibody produced by hybridoma S 3C10, an antibody produced by hybridoma S 16F6, the antibody produced by hybridoma S 16H11, the antibody produced by hybridoma S 17F6, the antibody produced by hybridoma S 19B3, the antibody produced by hybridoma S 19B4; and, the antibody produced by hybridoma S 19F10, under conditions which allow for the formation of an antibody-ESB virus complex; and,
- (b) detecting the antibody-ESB virus complex wherein the presence or absence of the complex indicates the presence or absence of ESB virus in the sample.

**27.** The method of claim **26** wherein, said monoclonal antibody is chosen from the group consisting of MAb 3C10, MAb 16F6, MAb 16H11, MAb 17F6, MAb 18B3, MAb 19B4 and MAb 19F10.

**28.** The method of claim **26** wherein said MAbs compete for binding to GP with an antibody chosen from the group consisting of MAb 3C10, MAb 16F6, MAb 16H11, MAb 17F6, MAb 18B3, MAb 19B4 and MAb 19F10.

**29.** The method of claim **21** wherein said composition comprises antibodies which compete for binding to GP with an antibody chosen from the group consisting of MAb 3C10, MAb 16F6, MAb 16H11, MAb 17F6, MAb 18B3, MAb 19B4 and MAb 19F10.

**30.** The method of claim **24** wherein said composition comprises antibodies which compete for binding to GP with an antibody chosen from the group consisting of MAb 3C10, MAb 16F6, MAb 16H11, MAb 17F6, MAb 18B3, MAb 19B4 and MAb 19F10.

**31.** A kit for detecting ESB virus in a biological sample, said kit comprising:

- (a) a container holding at least one MAb selected from the group consisting of MAb 3C10, MAb 16F6, MAb 16H11, MAb 17F6, MAb 18B3, MAb 19B4 and MAb 19F10, and
- (b) instructions for using said at least one antibody for the purpose of binding to ESB virus to form an immunological complex and detecting the formation of the immunological complex such that the presence or absence of immunological complex correlates with presence or absence of ESB in a sample.

**32.** A kit for detecting ESB virus in a biological sample, said kit comprising:

- (a) a container holding at least one MAb that competes for binding to ESB virus with a MAb selected from the group consisting of MAb 3C10, MAb 16F6, MAb 16H11, MAb 17F6, MAb 18B3, MAb 19B4 and MAb 19F10, and
- (b) instructions for using said at least one antibody for the purpose of binding to ESB virus to form an immunological complex and detecting the formation of the immunological complex such that the presence or absence of immunological complex correlates with presence or absence of ESB in a sample.

**33.** A vaccine against ESB infection comprising of an amino acid selected from a group consisting of: SEQ ID NO 2, SEQ ID NO 4, SEQ ID NO 6, SEQ ID NO 8, SEQ ID NO